System for Administration, Training and Education Resources for NASA (SATERN)

SATERN Upgrade to Plateau 5.8 SP5 Evaluation Sub-Team Report and Recommendations

April 28, 2009



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1. Introduction

1.1 Purpose

The purpose of this document is to outline how the Evaluation Sub-team developed recommendations in response to their charter. The intent is to outline the steps taken to develop the approach and recommendation toward understanding the new evaluation capabilities available in Plateau 5.8 SP5 and the Evaluation Sub-team recommendations regarding the use of these capabilities.

1.2 Sub-Team Charter

Implementation of the items recommended in this document by the SATERN Evaluation Subteam, will support NASA's learning evaluation strategy to produce useful, actionable, and meaningful data around which to assess its training and development programs. NASA will continue to have a Level 1 Agency Standard Evaluation available in for SATERN for both internal training and online learning. These recommendations address the use of Plateau 5.8 SP5 functionality for training evaluation and were developed as a way of achieving each of the goals identified in the sub-team charter which defines the scope of the work that the sub-team was asked to complete.

Evaluation Sub-team Charter

The goal of this sub-team is to review the new evaluation capabilities available in Plateau 5.8 SP5 and to make recommendations regarding the use of these capabilities. Specifically the goals of this team are to:

- 1) Review the current Agency form for training evaluation for SATERN and the strategy for the use of Metrics that Matter (MTM)
- 2) Compare current evaluation capability with new functionality available in Plateau 5.8 SP5 and.
- 3) Provide recommendations for implementation and use of Plateau 5.8 SP5 evaluation functionality
- 4) Identify and recommend business rules regarding evaluation
- 5) Make recommendations regarding evaluation configuration options
- 6) Provide suggestions regarding training and communications needs for rollout

Assumptions:

- MTM functionality operates outside of the SATERN learning management system. The decision to implement MTM has already been made and is outside the scope of this team and MTM will continue to be utilized.
- The team is informed about the work and recommendations of the SATERN Phase II Evaluation Sub-team, as well as previous NASA Agency-wide evaluation initiatives and will consider this information in making decisions and recommendations.

Deliverables:

• A document outlining findings and recommendations for utilizing the Plateau 5.8 SP5 evaluation functionality in SATERN.

1.3 Members

In January 2009, Center and Discipline SATERN Upgrade Leads were contacted and asked to provide volunteers to participate in five different sub-teams. The individuals who volunteered for the Evaluation sub-team brought a diverse mix of knowledge of the current evaluation process in SATERN, hands-on experience of MTM, and an understanding of the importance of assessing training in order to accurately demonstrate the value of training and development. Sub-team members have invested many hours to understand the new evaluation capabilities available in Plateau 5.8 SP5 and to develop the recommendations submitted for consideration in this report.

Following are the members of the Evaluation Sub-team:

ARC	Bert Beattie	KSC	Robert Hubbard
GRC/ITS	Diane Maier	MSFC	Elisabeth Cox
GRC/SMA	Kerry Remp	NSSC	Cassandra Clark
HQ	Cindy Steele	NSSC	Steve Bliss
HQ	Lauren Leo	NSSC	Asya Kamenkovich
HQ	Erica Bovaird	NSSC	Roy Lee
HQ	Jessica Frincke	NSSC	Crystal Schossow
HQ	Yvette Robinson	Plateau	Lane Davis-Coury
HQ/APPEL	Heidi Cahill	Plateau	Daniel Prepetit

1.4 Approach

To accomplish the tasks outlined in the charter, the sub-team met weekly via teleconference and the meetings were recorded. Additional training sessions were scheduled as required and included the use of demonstrations via WebEx. Work was completed between meetings by members of the team and presented to all sub-team members at the next meeting. In addition, all team members had access to Plateau 5.8 SP5 evaluation functionality which was setup in the sandbox environment. Representatives from Plateau participated in team meetings providing knowledge of Plateau software, and demonstrated options through WebEx during team meetings. The HCIE portal was used to share documents and materials.

Given the amount of information that needed to be reviewed, a team member was assigned to be the lead for each section of the configuration guide. Where there were larger sections two team members were assigned. The lead(s) reviewed the configuration options, utilized the sandbox to increase understanding of the options and made recommendations and presented to the team at the scheduled meeting. At the meeting the team members discussed the recommendations and had the opportunity to offer additional suggestions.

The team used a consensus method of decision-making. The resulting recommendations are detailed in Section 2.

1.5 Agency Evaluation Strategy

Plateau 5.8 SP5 provides the expanded capability in learning evaluation for the ability to include evaluation levels 1-3 in SATERN. Given that MTM includes evaluation levels 1-5, there was some confusion regarding the Agency intent for usage of SATERN and MTM. In order to meet the stated objectives, and before any decisions could be made regarding the use of the SATERN evaluation, it was concluded that there was a need to first understand the Agency's Learning Evaluation Strategy. The Evaluation Sub-team Lead participated in several meetings led by the Agency Training Officer to discuss the Agency's Learning Evaluation Strategy. The draft strategy is outlined in Appendix A. This strategy informed the recommendations for the SATERN Evaluation Sub-team.

2. Recommendations

The sub-team focused each meeting on determining recommendations for specific areas. The Evaluation Sub-team discussions included a wide range of topics including evaluation methodology (e.g. Kirkpatrick's Four Levels of Evaluation), reporting needs, and notifications. The team used a consensus method of decision-making.

This section provides recommendations to address the charter tasks as well as other issues uncovered during team meetings. While each of the recommendations is outlined individually, it is suggested that the various recommendations be considered collectively and with a holistic view. Each recommendation in the following sections is outlined in the Extract for Configuration Workbook for Evaluation provided in Appendix B.

2.1 Agency Standard Evaluation for SATERN

There are currently three Standard Agency Level 1 Evaluations: 1) internal training - instructor led, 2) internal training - online learning, and 3) external training for use by the NSSC. The forms were created by the Phase II Evaluation Sub-team and approved by all Centers and Disciplines. The Standard Agency Level 1 Evaluation provides a reliable, valid, and balanced set of standardized measures.

2.1.1. Internal Training – Instructor Led

The sub-team compared the Standard Agency Level 1 Evaluation to the MTM Post Event Evaluation and learned that the evaluations were practically identical, with the exception of four questions captured in the MTM Post Event Evaluation that addressed Learning Objectives. Upon discussion, it was decided to recommend that the Standard Agency Level 1 Evaluation be revised to include the additional four questions below:

- ➤ 1) The course objectives were met.
- > 2) Overall this course met my needs and expectations.
- > 3) My manager and I set expectation for this learning prior to attending the training.
- ➤ 4) Overall this course is appropriate to a person with my level of experience.

The benefit to NASA would be the ability to allow comparisons between training courses evaluated in SATERN and MTM.

Recommendation: The team recommends continuing the use of the Standard Agency Level 1 Evaluation in SATERN, and incorporating four questions from the MTM evaluation that address Learning Objectives. A copy of the revised Standard Agency Level 1 Evaluation is provided in Appendix C.

2.1.2. Internal Training – Online Learning

SATERN currently uses a survey to collect user feedback after completing online learning. At this time, both the Information Technology Security and Safety and Mission Assurance Disciplines utilize the online learning survey to assess the effectiveness and quality of training. The online learning survey is administered by attaching to courses within SATERN. Where applicable, SkillSoft courses will continue to integrate course tests/evaluations that are not administered via the SATERN Online Course Evaluation form.

The sub-team discussed the Online Course Evaluation and believes the form is appropriate and effective.

Recommendation: The team recommends creating the Online Course Evaluation using the SP5 Feedback Evaluation tool. This survey can be associated with online items and will be assigned automatically when the user successfully completes the online item. A copy of the Online Course Evaluation is provided in Appendix D.

2.1.3. External Training

The team has determined there is not a continuing need for a SATERN external evaluation due to the fact that Centers do not utilize the data gathered from the evaluations. The External Training Sub-Team will be recommending a verification process which does not include the need for a training evaluation to be completed by a user in SATERN.

Recommendation: The team recommends no SATERN evaluation be administered for external training. It is recognized that the Agency Learning Evaluation Strategy may require evaluation for certain external training courses and activities, but this evaluation will not be administered in SATERN.

2.2 Administrator Permissions

The table below lists the new 5.8 SP5 workflows for SATERN Administrators. New workflows do not automatically get added to Admin Roles – they must be added manually. Below are all the new 5.8 SP5 workflows and the recommended Admin Roles.

Recommendation: Allow the following Admin workflows.

Learning Management for Evaluations

Workflow	Admin Role(s)		
Add Questionnaire Surveys	NASA Plateau Admin, NASA-RA1		
Copy Questionnaire Surveys	NASA Plateau Admin, NASA-RA1		
Delete Questionnaire Surveys	NASA Plateau Admin, NASA-RA1		
Edit Component Evaluation	NASA Plateau Admin, NASA-RA1, NASA-IDA-8		
Edit Questionnaire Surveys	NASA Plateau Admin, NASA-RA1		
Edit Questionnaire Surveys Item Usage	NASA Plateau Admin, NASA-RA1		
Search Questionnaire Surveys	NASA Plateau Admin, NASA-RA1, NASA-TOA-3, NASA-IDA-8		
Unassign Survey from User	NASA Plateau Admin, NASA-RA1, NASA-TOA-3, NASA-IDA-8		
View Component Evaluation	NASA Plateau Admin, NASA-RA1, NASA-TOA-3, NASA-IDA-8, NASA-VO-11		
View Questionnaire Surveys	NASA Plateau Admin, NASA-RA1, NASA-TOA-3, NASA-IDA-8, NASA-VO-11		

Report Workflows Related to Evaluations

Workflow	Role(s)	
Run Item Evaluation By Individual Response Report	NASA Plateau Admin, NASA-RA1, NASA-TOA-3, NASA-IDA-8, NASA-IDR-9,NASA-VO-11	
Run Item Evaluation By Instructor Report	NASA Plateau Admin, NASA-RA1, NASA-TOA-3, NASA-IDA-8, NASA-IDR-9,NASA-VO-11	
Run Item Evaluation Report	NASA Plateau Admin, NASA-RA1, NASA-TOA-3, NASA-IDA-8, NASA-IDR-9,NASA-VO-11	
Run Follow-up Evaluation Report	This is for Level 3 evaluation and is not relevant	
Run Learning Evaluation Report	NASA Plateau Admin, NASA-RA1, NASA-TOA-3, NASA-IDA-8, NASA-IDR-9,NASA-VO-11	

Workflow	Role(s)
Run Follow-up Evaluation by Individual Response Report	This is for Level 3 evaluation and is not relevant

System Admin for Evaluations

Workflow	Role(s)
Edit Follow-up Evaluation Synchronization Automatic Process	This is for Level 3 evaluation and is not relevant

2.3 Reporting

There are six new reports available in Plateau 5.8 SP5 which analyze evaluation data in both chart and tabular format as follows:

- 1. **Level 1 Item Evaluation:** The report shows the mean score (the average results of the rating scale questions) for each survey; survey page; and survey question and the percentage of users who selected each response.
- 2. **Level 1 Item Evaluation by Individual Responses:** This report shows each user's responses to the survey questions.
- 3. **Level 1 Item Evaluation by Instructor:** This report shows the mean score (the average results of the rating scale questions) for each survey and survey page; grouped according to the instructor.
- 4. **Level 2 Learning Evaluation:** This report shows the training effectiveness of items based on the average pre-test and post-test mean scores.
- 5. **Level 3 Follow-up Evaluation:** This report shows the mean score (the average results of the rating scale questions) for each follow-up survey; survey page; and survey question.
- 6. **Level 3 Follow-up Evaluation by Individual Responses:** This report shows the mean score (the average results of the rating scale questions) for each follow-up survey and survey page.

The team reviewed all sample reports which covered all three levels of learning: participant reaction (Level 1); learning (Level 2); and application of learning to the job (Level 3).

Recommendation: The team found the evaluation reports in Plateau 5.8 SP5 to be sufficient in addressing Center/Discipline needs. As a result, there is not a need to develop any additional custom reports at this time.

2.4 Notifications

There are three new notifications in Plateau 5.8 SP5: Mandatory Item Eval Assigned, Follow Up Survey Assigned, and Optional Item Eval Assigned. The team reviewed the notifications to discuss their use and applicability. Based on the Agency Learning Evaluation Guidelines, Level 3 evaluations will not be used in SATERN; therefore there is no need for the "Follow Up Survey Assigned" notification. The "Mandatory Item Eval Assigned" notification will also not be required because the team is recommending that the mandatory evaluation should not be used.

Recommendation: For easy access to the Optional Item Evaluation, it is recommended that a link to the Survey page be included in the notification. If in the future, it becomes an Agency policy to avoid any use of links in e-mails, then the link can be removed. A copy of the Optional Item Eval Assigned notification has been provided in Appendix E.

2.5 Completion Status

One of the tasks assigned to this team was to provide suggestions regarding which completion status should record learning as surveys may be configured so that they are required for Item completion. The team discussed the various statuses available for successful completion (Figure 1) and the options presented with the upgrade to Plateau 5.8 SP5.

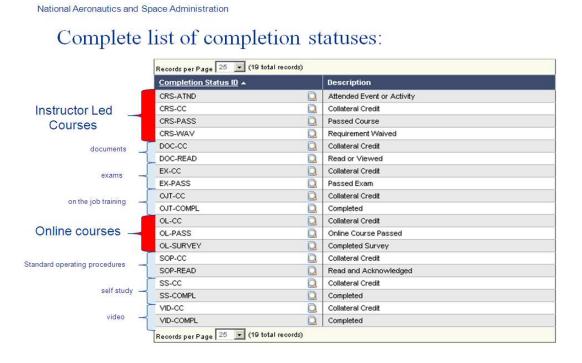


Figure 1

In general, the team agrees that assigning a survey that is configured so that the item will not be marked complete without the user completing that survey may cause several issues: (1) the item

will remain in a pending state until the survey has been completed by the user, (2) may cause confusion to some users because they will not understand why the item is not completed once they have finished the course; (3) if a required survey is given a specific timeframe for completion and it is not completed within that timeframe, the item in pending will have to be marked "Completed" by an SATERN Administrator. These scenarios may cause increased call volume to the NSSC SATERN Help Desk.

Recommendation: Level 1 surveys (basic survey) will not trigger a completion status, will be optional, and will not be configured as required for Item completion. (Note: This is a configuration option and is also a business rule).

2.6 Business Rules

One of the tasks indicated in the Evaluation Sub-team charter was to identify and recommend business rules or guidance concerning conduct, actions, and procedures within SATERN with regard to evaluations. These rules are needed when system functionality cannot enforce Agency-defined usage.

Recommendation: The following business rules are recommended to ensure consistency in data collection and allow for course comparisons:

- SATERN Administrators should use the SATERN Level 1 Agency standard evaluations for applicable internal training (instructor led and online learning). Administrators should not add, delete or modify questions in these standard evaluations. These evaluations can be found in Appendix C and D.
- SATERN Administrators should not use the Level 3 evaluation functionality in SATERN. If Level 3 evaluation is required, SATERN Administrators should contact the Agency MTM Administrator.
- SATERN Administrators should not set a Level 1 survey as required for Item completion. (Refer to Section 2.5 for a discussion on the reasons for this recommendation.)

For Official Business Rules write-up, please see Appendix F.

2.7 Training and Communication

Part of the charter tasked this team with providing suggestions regarding training and communications needs for rollout. The team discussed that the evaluation functionality offered in Plateau 5.8 SP5 will be a change to SATERN users at all levels. Currently, internal training evaluations are not available in SATERN and are administered outside of the SATERN system. Based on this change, it is recommended that training be provided to SATERN Administrators to include an overview of the evaluation functionality. Additionally, users will no longer complete evaluations outside of SATERN, but will now be required to complete evaluations in SATERN. For supervisors, an awareness of the new functionality will be needed as this may be a change to managing their employees. Communications and training materials will need to reflect the needs of all audiences.

3. Summary

Outlined in this report are options for utilizing the Plateau Evaluation 5.8 SP5 functionality in SATERN. The Evaluation Sub-team appreciates the opportunity to submit these recommendations, which include Agency, Center and Discipline perspectives.

3.1 Next Steps

The SATERN 5.8 SP5 Upgrade Core Team, Technical Team, and Center / Discipline Full-Team Representatives (one per Center or Discipline) are requested to submit the Feedback Form indicating agreement or disagreement with these recommendations. The Feedback Form is located at the end of the document. With stakeholder approval of the proposed recommendations and approach, the plan for implementation of the recommendations can begin.

Appendix A. Agency Learning Evaluation Guidelines

SATERN	DECISION POINTS	MTM
Civil servants and contractors	• Employee Type	Development courses designed for Civil Servants
• <1 day – approx 2 days	Length of time of training	Longer class duration (e.g. 5 day course0Residential program
 Level 1 – Agency standard available Level 2 – Pre/Post Tests for content; Customized by Center/Discipline 	 Level of evaluation needed Applicability of questions Need for flexibility or customization 	 Agency standard instruments If Level 3, 4 or 5 evaluation is needed all evaluation levels (1-5) should be completed in MTM* Center/Discipline can add questions to Agency standard instrument
Standard Level 1 evaluation is a valid measurement tool	 Validity of measurement instruments Need to benchmark performance against other agencies or industries 	 Valid standard Level 1-5 evaluation tools Benchmark data available
 Awareness training/briefings where focus is not for participants to apply skills Training workshop (e.g. training on new Agency systems) Information sharing Summits Online training in SATERN 	Type of training	 Agency-wide courses* All Leadership courses* (Internal and external) APPEL* Coaching
Minimum investment	Level of Investment	 >\$2,500 Training deemed as high value to Center; high human capital or financial investment
Limited standard reports	Reporting requirements	Extensive reporting including trends and benchmarking

Overview of Training Evaluation

Kirkpatrick/Phillips Model

	Type of Evaluation	Purpose		
†	Level 1 Measures Reaction to Event	To determine participants' feelings about the event	What reactions do we want participants to have to the program and materials?]
SATERN	Level 2 Measures Learning	To determine if learners have acquired new skills, knowledge or attitudes	What do we want participants to learn during the training?	
	Level 3 Measures Application of Learning to the Job	To determine changes in behavior on the job through the application of knowledge, skills and attitudes learned in training	How do we want training to influence behavior?	MTM –
	Level 4 Measures Business Results	To determine if learning event contributed to organizational improvement	To what extent do we want to ensure consistency in performance?	
	Level 5 Measures ROI	To determine if the investment in the training event provided a positive return to the organization	What is the cost/benefit analysis of key training programs?	

Appendix B. Extract for Configuration Workbook for Evaluations

1) Admin Deltas Related to Evaluations

1.1 User Management

1.1.1 User – Survey Tab

A new tab on the User record allows admins to view and/or remove questionnaire surveys from users. Admins may choose to view Item Evaluations, Follow-up Evaluations or both. Admins may sort by Item, Required Date or Assignment Type.

Notes

1.1.2 Tools – User Needs Management – Remove Surveys

The User Needs Management tool now allows for the batch removal of surveys (along with adding/removing items, curricula, competencies, and competency profiles).

Notes

1.2 Learning Management

SS.2.3 Learning Menu – New Entity: Questionnaire Surveys

Surveys are built in the Plateau Admin application and published so they may be associated with Items. Question types include Multiple Choice (checkbox), Rating Scale (uses existing rating scales), Single Choice (radio button) and Open Ended.

Surveys may be configured to be anonymous and also so they are required for Item completion (Learning Event which triggers survey assignment is not finalized until survey is completed by the user). Notifications are configurable at the survey level as well and support attachments.

Surveys must be associated with one of two levels: Item Evaluation: User Satisfaction (Level 1) or Follow-up Evaluation: Application of Learning (Level 2). Level 1 surveys are automatically assigned to users when a learning event is recorded for the item. Level 2 surveys are automatically assigned to users and/or their supervisors after a predetermined amount of time has passed since the learning event was recorded for the

item. An automatic process (see section 1.10.4) must run in order to assign the followup surveys and notify the users and/or supervisors.

Notes

1.2.2 Items – Evaluations Tab

After surveys are created they are associated with Items and configured. Admins may add Item Evaluations and Follow-up Evaluations, and also designate PQE Exams as Pre and Post Tests to measure improvement (PQE Exams must already be associated with the Item as online content).

Note	;

1.2.3 Learning References – Completion Status Evaluation Settings

Level 1 and Level 3 evaluations are triggered when learning events are recorded for users and there are active surveys associated with the item (see SS.2.3). In order for surveys to be automatically triggered, the completion statuses must be configured to include a survey (some completion statuses should not trigger a survey – e.g., 'not for credit' completion statuses).

Because this feature requires configuration – below is a list of all system completion statuses and their associated evaluation settings.

Completion Status	Trigger Item Evaluation Survey	Trigger Follow-up Survey
CRS-ATND	Υ	NA
CRS-CC	Υ	NA
CRS-PASS	Y	NA
CRS-WAV	Υ	NA
DOC-CC	Y	NA
DOC-READ	Y	NA
EX-CC	Y	NA
EX-PASS	Y	NA
OJT-CC	Y	NA

Completion Status	Trigger Item Evaluation Survey	Trigger Follow-up Survey
OJT-COMPL	Υ	NA
OL-CC	Υ	NA
OL-PASS	Υ	NA
OL-SURVEY	Υ	NA
SOP-CC	Υ	NA
SOP-READ	Υ	NA
SS-CC	Υ	NA
SS-COMPL	Υ	NA
VID-CC	Υ	NA
VID-COMPL	Υ	NA

1.3 Reports

- 1.3.1 New Reports for Plateau Evaluations (see Appendix A)
- Item Evaluation by Individual Responses: Shows the mean score (the average results of the rating scale questions) for each follow-up survey; survey page; and survey question, based on individual responses
- Item Evaluation by Instructor: Shows the mean score (the average results of the rating scale questions) for each follow-up survey; survey page; and survey question, based on the course instructor
- **Learning Evaluation** Allows admins to compare user scores on PQE exams which have been flagged as Pre-tests and Post-tests for items.
- Follow-up Evaluation by Individual Responses Shows the scores for users and/or supervisors for follow-up evaluations.

1.4 System Admin

1.4.1 Automatic Process Modules (APM)

Evaluation Synchronization

The Evaluation Synchronization automatic process performs two tasks:

 Sends survey assignment notifications for Item Evaluations and for Follow-up Evaluations 2. Assigns Follow-up Evaluations to users and their supervisors based on the assignment period configured for the Item.

This automatic process uses the 'ItemEvaluationAssignmentNotification' template to send Item Evaluation email notifications to the affected users.

The APM uses the 'FollowupEvaluationAssignmentNotification' template to send email notification to Follow-up Evaluation participants.

System Admin > Automatic Processes > Evaluation Synchronization					
Evaluation Synchronization					
Schedule This Process:	Options: Y/N				
		Hours	Every # of Hours:		
		Daily			
Schedule Frequency:		Weekly	Day:		
		Monthly	Date:		
Time of Day:		12 – 5 AI	M Maintenance Timeslot		
Time Zone:	America/New York				
Email Address:		ADMIN@	Customer Name>.com		
		Notes			
1.4.2 Editing Notification Template	es with F				
Admins can edit labels uses in notifications. You can use HTML to format emails, add links, images, etc. to notifications. Labels may be easily modified if the goal is to change the wording of system emails. Label changes require application server reboot to propagate.					
Notes					

1.4.3 New Notification Templates for Evaluations

The following notification templates are new to Plateau 5.8 and should be evaluated for possible modification.

Template	Trigger	Recipient(s)
ItemEvaluationAssignmentNotification	Learning Event is recorded for an item with an Item Evaluation associated.	User
FollowupEvaluationAssignmentNotification	Learning Event is recorded for an item with a Follow-up Evaluation and the Follow-up Evaluation APM runs.	User (if set at the item level) Supervisor (if set at the item level)

1.4.4 Configuration – Search Selectors for Evaluations

Configuration Option: You may choose to modify Field Chooser options for all searchable entities. Results Column options may be removed, set to Mandatory (user always sees the column), Default (user sees column but may choose to remove it), or Optional (user may add the column). Plateau recommends only technical administrators with knowledge of XML modify the Search Selector files. These settings are GLOBAL and therefore affect all other admins.

System Admin > Configuration Search Selectors

New Search Selectors:

Search Selector	Modification
QuestionnaireSurvey	None

1.4.5 User Roles for Evaluations

System administrators can allow groups of users to access any combination of user menus and submenus by assigning a user Role with an Assignment Profile. In previous versions, all users (learners) had the same set of menus. It is now possible to grant different communities of users different menu level access. At least one user role must be defined (Default User).

System Admin > Security > Role Management

Menu	Default User	Contractor
Learning		
Access Questionnaire Surveys	Υ	Y

Notes

1.4.6 Admin Roles for Evaluations

Listed below are new 5.8 workflows for administrators. New workflows do not automatically get added to Admin Roles – they must be added manually. Below are all the new 5.8 workflows with the Admin Roles they will be added to by <Customer Name>.

System Admin > Security > Role Management

Learning Management for Evaluations

Workflow	Admin Role(s)
Add Questionnaire Surveys	NASA Plateau Admin, NASA-RA1
Copy Questionnaire Surveys	NASA Plateau Admin, NASA-RA1
Delete Questionnaire Surveys	NASA Plateau Admin, NASA-RA1
Edit Component Evaluation	NASA Plateau Admin, NASA-RA1, NASA-IDA-8
Edit Questionnaire Surveys	NASA Plateau Admin, NASA-RA1
Edit Questionnaire Surveys Item Usage	NASA Plateau Admin, NASA-RA1
Search Questionnaire Surveys	NASA Plateau Admin, NASA-RA1, NASA-TOA-3, NASA-IDA-8
Unassign Survey from User	NASA Plateau Admin, NASA-RA1, NASA-TOA-3, NASA-IDA-8
View Component Evaluation	NASA Plateau Admin, NASA-RA1, NASA-TOA-3, NASA-IDA-8, NASA-VO-11
View Questionnaire Surveys	NASA Plateau Admin, NASA-RA1, NASA-TOA-3, NASA-IDA-8, NASA-VO-11

Report Workflows Related to Evaluations

Workflow	Role(s)
Run Item Evaluation By Individual Response Report	NASA Plateau Admin, NASA-RA1, NASA-TOA-3, NASA-IDA-8, NASA-IDR-9, NASA-VO-11
Run Item Evaluation By Instructor Report	NASA Plateau Admin, NASA-RA1, NASA-TOA-3, NASA-IDA-8, NASA-IDR-9,NASA-VO-11
Run Item Evaluation Report	NASA Plateau Admin, NASA-RA1, NASA-TOA-3, NASA-IDA-8, NASA-IDR-9,NASA-VO-11
Run Follow-up Evaluation Report	This is for Level 3 evaluation and is not relevant
Run Learning Evaluation Report	NASA Plateau Admin, NASA-RA1, NASA-TOA-3, NASA-IDA-8, NASA-IDR-9,NASA-VO-11
Run Follow-up Evaluation by Individual Response Report	This is for Level 3 evaluation and is not relevant

System Admin for Evaluations

Workflow	Role(s)
Edit Follow-up Evaluation Synchronization Automatic Process	This is for Level 3 evaluation and is not relevant

User Deltas for Evaluations

1.5 Learning > Surveys

The new menu option displays the list of the surveys assigned to the User based on items completed, in support of the questionnaire survey feature.

1.6 Label Changes

Label values may be modified throughout the User and Admin interfaces to accommodate necessary terminology changes. Labels may be identified and modified at **System Admin > References > Labels**. Search for the label by its 'Label Value' or 'Label ID' and edit the values on the Locale tab of the label to make changes. The number of Locales is determined by licensed Language Packs.

To achieve a larger find/replace of label values, it is possible to export labels as text from **System Admin > Tools > Label Import/Export**. Make the modifications in a text editor and re-import the labels.

Below are required label changes captured during the Learning Configuration Workshop:

Label ID	Locale	Locale Value	New Locale Value
NA			

Notes

Appendix A: Reports Related to Evaluations

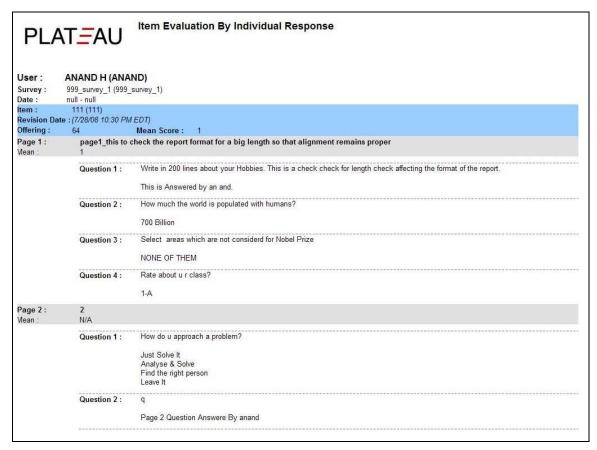


Figure 1: Item Evaluation by Individual Response

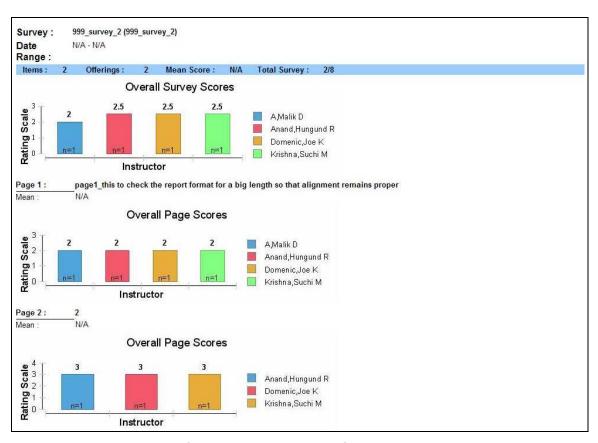


Figure 2: Item Evaluation by Instructor

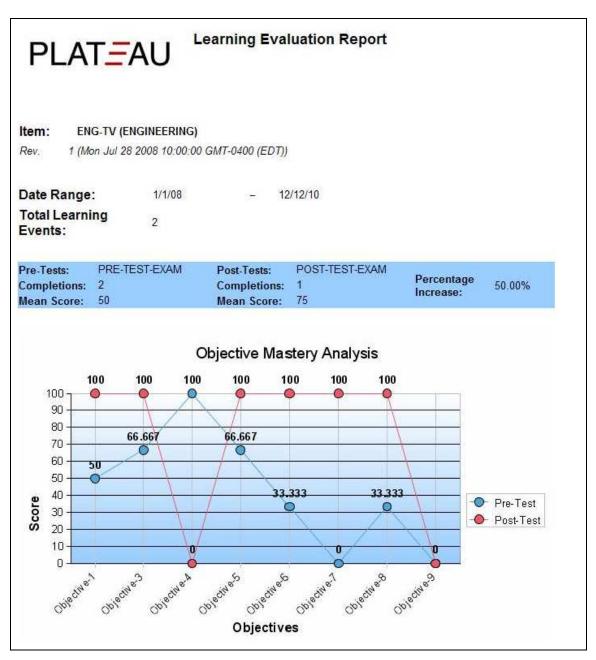


Figure 3: Learning Evaluation Report

Appendix C. Standard Agency Level 1 Evaluation

Internal Training Survey

Your completion of this questionnaire will help us make improvements to our programs. It will take you no more than 5 minutes to complete this evaluation. Your feedback will remain confidential. Thank you for providing your input.

Facilitator

2. The facilitators were knowledgeable about the subject.
{Choose one}
() Strongly Disagree
() Disagree
() Neither Agree nor Disagree
() Agree
() Strongly Agree
3. The facilitators were prepared and organized.
{Choose one}
() Strongly Disagree
() Disagree
() Neither Agree nor Disagree
() Agree
() Strongly Agree
4. Participants were encouraged to take part in the discussion.
{Choose one}
() Strongly Disagree
() Disagree
() Neither Agree nor Disagree
() Agree
() Strongly Agree

5. The f	acilitators sufficiently responded to participant's needs / questions.
{Choose o	one}
() S	trongly Disagree
() D	isagree
() N	either Agree nor Disagree
() A	gree
() S	trongly Agree
6. The f	acilitators' energy and enthusiasm kept the participants engaged.
{Choose o	one}
() S	trongly Disagree
() D	isagree
() N	either Agree nor Disagree
() A	gree
() S	trongly Agree
7. On-th	ne-job application of each objective was discussed during the program.
{Choose o	one}
() S	trongly Disagree
() D	isagree
() N	either Agree nor Disagree
()A	gree
() S	trongly Agree
Learning E	nvironment
8. The p	physical environment was conducive to learning.
{Choose o	one}
() S	trongly Disagree
() D	isagree
() N	either Agree nor Disagree
() A	gree
() S	trongly Agree

9. The training office support / services were helpful.
{Choose one}
() Strongly Disagree
() Disagree
() Neither Agree nor Disagree
() Agree
() Strongly Agree
10. Please provide detail as to how we can improve the learning environment
{Enter answer in paragraph form}
Learning Objectives
The course objectives were met.
{Choose one}
() Strongly Disagree
() Disagree
() Neither Agree nor Disagree
() Agree
() Strongly Agree
Overall this course met my needs and expectations.
{Choose one}
() Strongly Disagree
() Disagree
() Neither Agree nor Disagree
() Agree
() Strongly Agree
My manager and I set expectation for this learning prior to attending the training.
{Choose one}
() Strongly Disagree
() Disagree
() Neither Agree nor Disagree
() Agree
() Strongly Agree

	I this course is appropriate to a person with my level of experience. ose one
) Strongly Disagree
_) Disagree
) Neither Agree nor Disagree
) Agree
) Strongly Agree
Progran	n Content
11. T	The length of the program was appropriate to cover the content.
{Choo	ose one}
() Strongly Disagree
() Disagree
() Neither Agree nor Disagree
() Agree
() Strongly Agree
12. T	The instructional material was organized logically.
-	ose one}
() Strongly Disagree
() Disagree
() Neither Agree nor Disagree
() Agree
() Strongly Agree
13. T	The examples presented helped me understand the content.
{Choo	ose one}
() Strongly Disagree
() Disagree
() Neither Agree nor Disagree
() Agree
() Strongly Agree

14. The participant material will be useful on the job.
{Choose one}
() Strongly Disagree
() Disagree
() Neither Agree nor Disagree
() Agree
() Strongly Agree
15. The program content is relevant to my job.
{Choose one}
() Strongly Disagree
() Disagree
() Neither Agree nor Disagree
() Agree
() Strongly Agree
16. The program content is important to my job.
{Choose one}
(Choose one) () Strongly Disagree
() Strongly Disagree
() Strongly Disagree () Disagree
() Strongly Disagree() Disagree() Neither Agree nor Disagree
() Strongly Disagree() Disagree() Neither Agree nor Disagree() Agree
 () Strongly Disagree () Disagree () Neither Agree nor Disagree () Agree () Strongly Agree
 () Strongly Disagree () Disagree () Neither Agree nor Disagree () Agree () Strongly Agree 17. I would recommend this program to others.
() Strongly Disagree () Disagree () Neither Agree nor Disagree () Agree () Strongly Agree 17. I would recommend this program to others. {Choose one}
() Strongly Disagree () Disagree () Neither Agree nor Disagree () Agree () Strongly Agree 17. I would recommend this program to others. {Choose one} () Strongly Disagree
() Strongly Disagree () Disagree () Neither Agree nor Disagree () Agree () Strongly Agree 17. I would recommend this program to others. {Choose one} () Strongly Disagree () Disagree
() Strongly Disagree () Disagree () Neither Agree nor Disagree () Agree () Strongly Agree 17. I would recommend this program to others. (Choose one) () Strongly Disagree () Disagree () Neither Agree nor Disagree

18. Please provide details as to how we can improve the program content.

{Enter answer in paragraph form}

Learning

()41-60%

19. I have learned new knowledge / skills from this program.
{Choose one}
() Strongly Disagree
() Disagree
() Neither Agree nor Disagree
() Agree
() Strongly Agree
20. I am confident in my ability to apply the knowledge / skills learned from this program.
{Choose one}
() Strongly Disagree
() Disagree
() Neither Agree nor Disagree
() Agree
() Strongly Agree
21. Rate your skill level of the course content BEFORE attending the program the program.
(0% = no knowledge; 100% = expert skills):
{Choose one}
() 0 - 20%
() 21 - 40%
() 41 - 60%
() 61 - 80%
() 81 - 100%
22. Rate your skill level of the course content AFTER attending the program.
(0% = no knowledge; 100% = expert skills):
{Choose one}
() 0 - 20%
() 21 - 40%

Planned Application
23. How frequently will you apply the knowledge and skill learned in the course?
{Choose one}
() Infrequently
() Occasionally
() Sometimes
() Often
() Frequently
24. What will be your level of effectiveness with the knowledge and skills learned in the course?
{Choose one}
() Low
() Low-Medium
() Medium
() Medium-High
() High
Barriers / Enablers to Application
25. Which of the following barriers will most likely prevent you from applying
knowledge / skills learned from the course?
{Choose one}
() Opportunity to use.
() Lack of management support.
() Lack of support from colleagues and peers.
() Insufficient knowledge and understanding.
() System and processes within the organization will not support application of knowledge and skills.
() I do not expect barriers to application.

() 61 - 80% () 81 - 100%

Barriers / Enablers to Application

$26. \ Which of the following will most likely enable you to apply knowledge \it / skills learned from the course? \\$

{Cl	noose one)
	() Opportunity to use
	() Management support
	() Support from colleagues and peers.
	() Knowledge and understanding
	() Confidence to apply Knowledge/skills
	() Systems and process within the organization will support application of knowledge and skills.
	Please provide any additional comments as to how we can improve your overall rning experience.
{En	ter answer in paragraph form}
[]	

Thank you for your input.

Appendix D. Online Course Evaluation

Your completion of this questionnaire will help us make improvements to our courses. It will take you approximately 5 minutes to complete the evaluation. Your feedback will remain confidential. Thank you for providing your input.

Le	Learner									
1.	How	would you describe your primary job?								
	9	Scientific								
		Engineering Technical Administrative								
		Clerical								
		Management								
	2. V	Why did you take this particular training module (select all that apply)?								
		Mandatory/Directed								
		Mission or Program Change								
		New Technology								
		New Work Assignment								
		Improve Present Performance								
		Future Plans and Goals								
Le	earı	ning Environment								
3.		physical environment (office/home) was conducive to learning.								
	0	Strongly Agree Agree Neither Agree nor Disagree Disagree								
	Str	ongly Disagree								
	4. T	The SATERN environment (online) was conducive to learning. Strongly Agree								
	Stro	ongly Disagree								

5. Please provide detail as to how we can improve the learning environment.

Course Content

6.	The length of the course	was appropri	ate to cover the content.		
	Strongly Agree Strongly Disagree	Agree	Neither Agree nor Disagree	0	Disagree
0	7. The course was organ Strongly Agree Strongly Disagree		Neither Agree nor Disagree	C	Disagree
	Strongly Agree		understand the content. Neither Agree nor Disagree	C	Disagree
	9. The course met the state of Strongly Agree Strongly Disagree		Neither Agree nor Disagree	6	Disagree
D	10. The course content Strongly Agree Strongly Disagree			6	Disagree
0	11. The course content Strongly Agree Strongly Disagree		my job. Neither Agree nor Disagree		Disagree
0	12. I would recommend Strongly Agree Strongly Disagree		others. Neither Agree nor Disagree	6	Disagree

	13.	Please provide	detail	as to h	ow we	can improve the course co	ntent.	
						V		
						Þ		
Le	ear	ning						
14.	. I h	nave learned nev	w knov	vledge/	skills	from this course.		
		Strongly Agree		Agree		Neither Agree nor Disagree		Disagree
	Str	ongly Disagree						
		I am confident	in my	ability	to app	ly the knowledge/skills lea	rned f	rom this course.
		Strongly Agree		Agree		Neither Agree nor Disagree		Disagree
	Str	ongly Disagree						
					ourse c	ontent <u>BEFORE</u> attending t	he pro	gram (0% = no
Kne	owie	edge; $100\% = ex$	xpert s	SKIIIS):				
		21-40%						
		41-60%						
		61-80%						
		81-100%						
	17.	Rate your skill	level o	f the co	ourse c	ontent <u>AFTER</u> attending the	e prog	ram (0% = no
kno	owle	edge; 100% = e x	xpert s	skills):				
		0-20% 21-40%						
		41-60%						
		61-80%						
		81-100%						
	18.	Not including in	nterrup	otions,	how lo	ng did this course take to c	omple	ete (in hours)?
		1/2						
		1						
		1 1/2;						
		2						

	2 1/2; 3 3 1/2; 4 more than 4
	ned Application w frequently will you apply the knowledge and skills learned in the course?
19. HO	Infrequently
	Occasionally
	Sometimes
	Often
P-9	Frequently
course?	?
0	Low-Medium
C C	Low-Medium
0 0 0	Low-Medium Medium
Barri 21. Whowle	Low-Medium Medium-High
Barri	Low-Medium Medium Medium-High High

skills.	
	I do not expect barriers to application.
	Which of the following will most likely enable you to apply knowledge/skills learned he course?
	Opportunity to use.
	Management support.
	Support from colleagues and peers.
	Knowledge and understanding.
	Confidence to apply knowledge/skills
skills.	Systems and processes within the organization will support application of knowledge and
	ease provide any additional comments as to how we can improve your overall ng experience.
4	▼

When you are finished, please click the Submit button and wait for the survey to finish processing. The survey will automatically close, or prompt you to close the window.

Appendix E. Notification

Notification – Optional Item Eval Assigned

Subject: Notification for Questionnaire Survey

Our records indicate that you have completed Item ONLINE (SS-100).

This notification confirms your assignment of the Survey SATERN Survey for Feedback on Online Training (SATERN_SURVEY_ONLINE). Please complete this survey by MM/DD/YY.

Your feedback contributes to the overall improvements and quality of Items.

Completion of the assigned survey is not required in order to receive credit for Item ONLINE (SS-100).

You can launch this survey by clicking on the following link: http://kso-train.plateau.com/sp5/user/deeplink.do?linkId=QUESTIONNAIRE_SURVEY.

APM that controls this notification: Evaluation Synchronization

Appendix F. Business Rules

Conduct, Actions and Procedures Within Plateau 5.8 SP5 for When System Functionality Cannot Enforce Agency-defined Usage

This is a recommendation from the SATERN 5.8 Upgrade

Evaluation Sub-team

Background: One of the tasks indicated in the Evaluation Sub-team charter was to identify and recommend business rules or guidance concerning conduct, actions and procedures within SATERN with regard to evaluations. These rules are needed when system functionality cannot enforce Agency-defined usage.

The SATERN Standard Agency Level 1 Evaluation for instructor led and online learning evaluates the users' reaction to the training. It is a valid measurement tool that allows Centers to reliably gauge satisfaction, gain immediate feedback, and provide comparisons of courses/programs. Often only a Level 1 evaluation is necessary, depending on the type of training, level of investment, etc. The SATERN Level 3, follow-up evaluation, evaluates users' behavior after the training and assesses application of knowledge. MTM uses a five-level measurement model, the Kirkpatrick/Phillips Model, which goes beyond the SATERN Level 1 and 3 evaluations. The five levels include satisfaction, learning effectiveness, job impact, business results, and return on investment.

Issue: There is a need for standard data collection, storage, and reporting processes for training within NASA, as well as the ability to analyze training data across NASA. It is important to efficiently and effectively collect training data in a practical, scalable and repeatable manner. Managing the evaluation process can be a highly administrative effort.

Recommendation: The following business rules are recommended:

- SATERN Administrators should use the SATERN Level 1 Agency standard evaluation for applicable internal training (instructor led and online learning). Administrators should not add, delete or modify questions in these standard evaluations. These evaluations can be found in Appendix C and D.
- SATERN Administrators should not use the Level 3 evaluation functionality in SATERN. If Level 3 evaluation is required, SATERN Administrators should contact the Agency MTM Administrator.
- SATERN Administrators should not set a Level 1 survey as required for Item completion.

Evaluation Sub-Team Report and Recommendations Feedback Form

Submitted by:							
Cei	Center/Discipline:						
1.	Do you endorse the recommendations of the Evaluation Sub-Team? ☐ Yes ☐ No						
2.	If you indicated no, please identify the <u>showstoppers</u> regarding these recommendations:						
3.	Please note any feedback [comments or suggestions]:						
4.	Are there other areas that require attention?						

Email your response to <u>Yvette.Robinson-1@nasa.gov</u>. Thank you.